

This document provides additional assistance with wiring your Extron IP Link enabled product to your device. Different components may require a different wiring scheme than those listed below.

For complete operating instructions, refer to the user's manual for the specific Extron IP Link enabled product or the controlled device manufacturer supplied documentation.

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***Device Specifications:***

Device Type: DVD  
Manufacturer: Denon  
Firmware Version: N/A  
Model(s): DBP-2012UDCI

***Version History:***

| Driver Version | Date       | IP Link Compiler | GC Version | Notes  |
|----------------|------------|------------------|------------|--|
| 3              | 1/20/2012  | 1.5.1            | 3.3.1      | Extron Certified. Added Subtitle Command.                            |
| 2              | 12/30/2011 | 1.5.1            | 3.3.1      | Extron Certified. Fixed disconnection issues. Tested on DBP-2012UDCI |
| 1              | 8/22/2011  | 1.4.0            | 3.2.0      | Initial version.   |

***Driver Notes:***

This driver is not recommended for pass through mode.  
The subtitle command was not tested on the device.

# IP Link<sup>®</sup> Device Interface Communication Sheet

## Control Commands & States:

|                        |                                     |                        |                      |
|------------------------|-------------------------------------|------------------------|----------------------|
| <b>Angle</b>           | Toggle                              |                        |                      |
| <b>Aspect Ratio</b>    | 16:9<br>4:3 Letter Box              | 16:9 Wide              | 4:3 Pan Scan         |
| <b>Function</b>        | Clear<br>Display                    | Program<br>Random      | Setup                |
| <b>Keypad</b>          | 0 – 9                               | +10                    |                      |
| <b>Menu Call</b>       | Root Menu                           | Top Menu               | Home                 |
| <b>Menu Navigation</b> | Up<br>Right                         | Down<br>Enter          | Left<br>Return       |
| <b>Power Control</b>   | On                                  | Off                    |                      |
| <b>Repeat Mode</b>     | Repeat                              | AB                     |                      |
| <b>Subtitles</b>       | Primary                             | Primary Text           | Secondary            |
| <b>Transport</b>       | Play<br>Random<br>Previous<br>Eject | Stop<br>Repeat<br>FFwd | Pause<br>Next<br>Rew |

# IP Link<sup>®</sup> Device Interface Communication Sheet

**Status Available:**

|                                  |  |  |   |
|----------------------------------|--|--|---|
| <b>Connection Status</b>         | Connected  | Disconnected   |   |
| <b>Current Chapter/Track No.</b> | Chapter/Track No.  |  |   |
| <b>Current Title/Album No.</b>   | Title/Album No.  |  |   |
| <b>Disc Type Status</b>          | DVD Video<br>CD-ROM<br>DVD VR<br>AVCHD<br>AVCREC             | DVD Audio<br>Unknown<br>BDMV<br>Web Stream<br>External Memory    | CD-DA<br>SACD<br>BD-DAV<br>DLNA<br>Status Unavailable |
| <b>Playback Status</b>           | Standby<br>Tray Closing<br>Playing<br>Searching<br>DVD Menus | Disk Loading<br>No Disc<br>Paused<br>Setup<br>Status Unavailable | Tray Opening<br>Stopped<br>Scan<br>Resume Stop        |
| <b>Power Control</b>             | On   | Off  |   |
| <b>Subtitle Language</b>         | Japanese<br>Deutsch<br>Netherlands<br>Korean                 | English<br>Italian<br>Chinese<br>Other                           | French<br>Espanol<br>Russian<br>Status Unavailable    |
| <b>Transport</b>                 | Play   | Stop   | Pause   |

# IP Link<sup>®</sup> Device Interface Communication Sheet

## ***MLC62 Supported Commands:***

|                        |                                     |                        |                      |
|------------------------|-------------------------------------|------------------------|----------------------|
| <b>Angle</b>           | Toggle                              |                        |                      |
| <b>Aspect Ratio</b>    | 16:9<br>4:3 Letter Box              | 16:9 Wide              | 4:3 Pan Scan         |
| <b>Function</b>        | Clear<br>Display                    | Program<br>Random      | Setup                |
| <b>Keypad</b>          | 0 – 9                               | +10                    |                      |
| <b>Menu Call</b>       | Root Menu                           | Top Menu               | Home                 |
| <b>Menu Navigation</b> | Up<br>Right                         | Down<br>Enter          | Left<br>Return       |
| <b>Power Control</b>   | On                                  | Off                    |                      |
| <b>Repeat Mode</b>     | Repeat                              | AB                     |                      |
| <b>Subtitles</b>       | Primary                             | Primary Text           | Secondary            |
| <b>Transport</b>       | Play<br>Random<br>Previous<br>Eject | Stop<br>Repeat<br>FFwd | Pause<br>Next<br>Rew |

**Cable and Adapter Requirements:**

M/F RS-232 straight serial cable (Extron Electronics P/N 26-433-XX)

**Notes for the Device:**

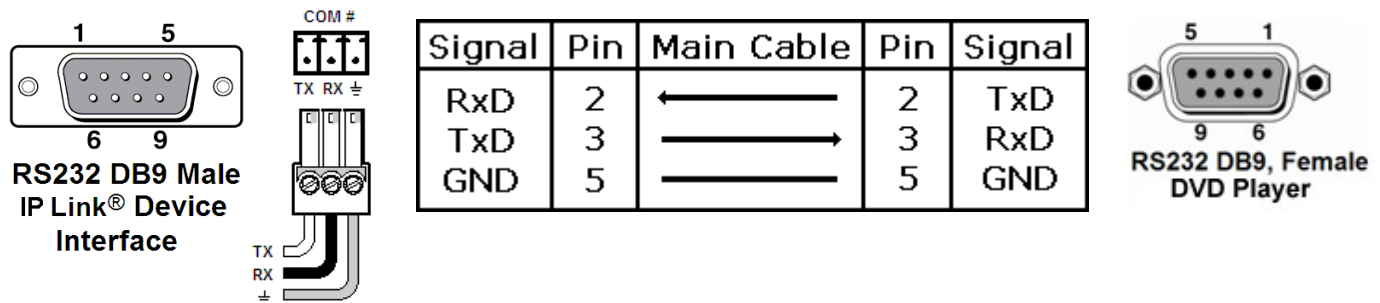
By default, the Denon DVD Power Saving option is set to ON. This will prevent the Denon device to communicate with control command when the device is on standby. In order to use the RS232 communication, you need to change the Power Saving option to OFF. To disable the Power Saving option, the steps are as follows:

System → General Settings → Power Saving

**Serial communication:**

**Port Type:** RS-232  
**Baud Rate:** 9600  
**Data Bits:** 8

**Parity:** Even  
**Stop Bits:** 1  
**Flow Control:** None

**Pin Assignments Diagram:**

Note: Captive screw connector may also be used as a serial connection.

**General Notes:**